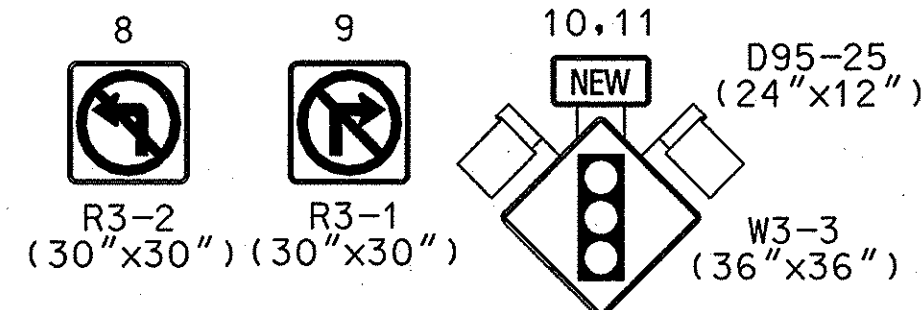
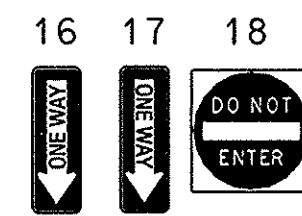


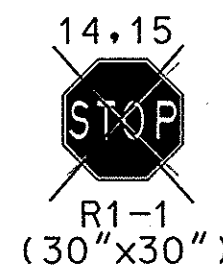
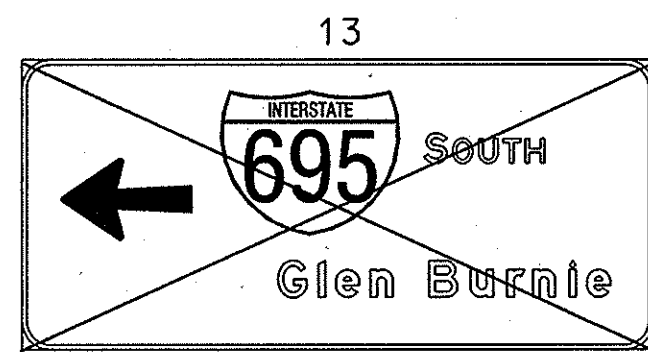
# PROPOSED SIGNS



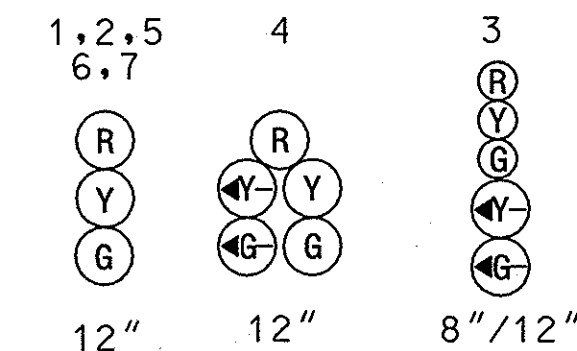
# EXISTING SIGNS TO REMAIN



# EXISTING SIGNS TO BE REMOVED



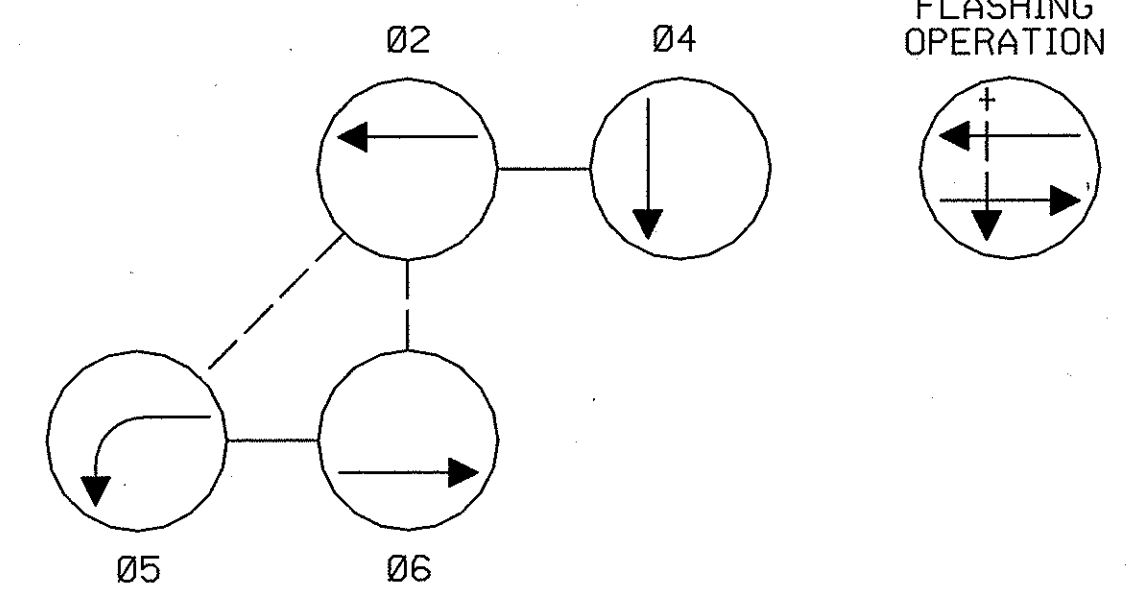
# PROPOSED SIGNALS



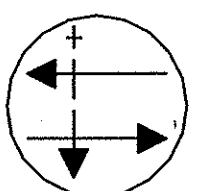
# PROPOSED VIDEO DETECTION

a, b, c, d

# NEMA PHASING



# FLASHING OPERATION



NOTE: PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

NOTE: INSTALL SIGN 11 WEST OF WOODLAWN AVENUE

MD 144 IS ASSUMED TO RUN IN EAST-WEST DIRECTION

TO CATONSVILLE

MD 144 (FREDERICK ROAD)

ARBUS AVENUE

WADE AVENUE

I-695 OUTER LOOP RAMP 6

I-695 (OUTER LOOP)

I-695 (INNER LOOP)

MD 144 (FREDERICK ROAD)

TO BALTIMORE

# CONSTRUCTION DETAILS

- INSTALL CONCRETE FOUNDATION WITH A 27 FT. STEEL POLE WITH SINGLE 70 FT. MAST ARM WITH SIGNAL HEADS, SIGNS, AND OVERHEAD VIDEO DETECTION CAMERAS. (NOTE: ONE 3 IN. PVC SCHEDULE 80 CONDUIT BEND)
- INSTALL CONCRETE FOUNDATION WITH A NEMA SIZE 6 BASE MOUNTED CABINET AND CONTROLLER. (NOTE: TWO-4 IN. PVC, AND TWO-2 IN. PVC SCHEDULE 80 CONDUIT BENDS).
- INSTALL 200 AMP METERED SERVICE PEDESTAL.
- INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT FOR ELECTRICAL SERVICE - TRENCHED. STUB UP CONDUIT BEND AT BASE OF UTILITY POLE.
- INSTALL 2 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- INSTALL HANDHOLE.
- INSTALL 24 IN. WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING TAPE FOR STOP LINE.
- REMOVE EXISTING OVERHEAD SIGN AND STRUCTURE.
- INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - SLOTTED.
- INSTALL CONCRETE FOUNDATION WITH A 14 FT. STEEL PEDESTAL POLE WITH BREAKAWAY BASE, SIGNAL HEAD MOUNTED ON PEDESTAL POLE TOP, AND SIGN. (NOTE: ONE 3 IN. PVC SCHEDULE 80 CONDUIT BEND)
- INSTALL GROUND MOUNTED SIGN.
- REMOVE EXISTING GROUND MOUNTED SIGNS.
- INSTALL 1 IN. LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE.
- INSTALL 6 FT. X 30 FT. LOOP DETECTORS ENCASED IN 1/4 IN. FLEXIBLE TUBING (3-6-3 TURNS)
- REMOVE AND REPLACE CONCRETE SIDEWALK.

# AERIAL CABLE DETAIL 1

PRIMARY	34'
SECONDARY	29'
PRIMARY (INSULATED)	25'
CABLE	22'
TELEPHONE	20'
GRADE	

# GENERAL NOTES

- VIDEO CAMERA LOCATION / ALIGNING SHALL BE COORDINATED WITH THE SHA ENGINEER.
- THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
- THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO INSTALLING PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS SHOULD ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
- ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS, HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
- ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH MSHA STANDARDS.

# GEOMETRIC LEGEND

EXISTING  
PROPOSED

# UTILITY LEGEND

SD	STORM DRAIN
G	GAS MAIN
W	WATER MAIN
SAN	SEWER MAIN
E	ELECTRIC CABLES
A	AERIAL CABLES
T	TELEPHONE CABLES
FO	FIBER-OPTIC

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APPROVALS	REVISIONS
TEAM LEADER TRAFFIC ENGINEERING DIVISION	
ASST. CHIEF TRAFFIC ENGINEERING DIVISION	
CHIEF TRAFFIC ENGINEERING DIVISION	
DIRECTOR, OFFICE OF TRAFFIC & SAFETY	

SHA

STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION

MD 144 (FREDERICK ROAD) &  
I-695 OUTER LOOP RAMP

CATONSVILLE, MARYLAND

TRAFFIC SIGNAL PLAN	
SCALE 1" = 20'	DATE 07/28/2005 CONTRACT NO. AT7175185
DESIGNED BY J. PALADUGU	COUNTY BALTIMORE
DRAWN BY J. PALADUGU	LOGMILE 03014404.04
CHECKED BY S. RENZI/J. WEAVER	T.I.M.S. NO. G650
F.A.P. NO. NA	TOD NO.
DRAWING NO. TS # 4381	SHEET NO. 1 OF 3

PLOTTED: FRIDAY, JULY 23, 2005 AT 03:01 PM  
FILE: RA2001N23 STA/TASK 21/DWG/PSG-P001.MD 144.DGN